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U. S. Department of Agriculture - Forest Service
CENTRAL STATES FOREST EXPERIMENT STATION

In Cooperation With
Ohio Agricultural Experiment Station
OHIO DIVISION OF FORESTRY

Technical Note No. 36

October 1, 1941.

VOLUME TABLE $\frac{1}{4}$
for

Eastern HEMLOCK
(*Tsuga canadensis*)
Holmes County, Ohio

Merchantable Stem to a Variable Top Diameter							INTERNATIONAL Rule ($\frac{1}{4}$ " Kerf)	
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height						Basis in trees	
	1 log	2 logs	3 logs	4 logs	5 logs	6 logs		
	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Number	
8	14	27	41				4	
9	18	34	51				7	
10	22	42	62	83			5	
11	26	50	75	100			8	
12		59	88	118	147		6	
13		69	103	137	172		6	
14		80	119	158	193		5	
15		91	136	180	223		5	
16		103	153	204	255		6	
17			172	229	286	344	7	
18			192	256	320	384	3	
19			213	284	354	426	7	
20			235	313	391	469	6	
21			258	343	429	515	4	
22			282	375	469	563	5	
23			306	408	510	613	3	
24			333	443	554	665	2	
25			360	479	599	719	3	
26			388	516	645	775	2	
27				555	694	838	-	
28				595	744	893	1	
29					795	955	-	
30					848	1018	-	
31					903	1085	2	
Basis in trees-- number	4	16	21	25	21	10	97	

Trees climbed and measured by personnel of Work Projects Administration Official Project 65-1-42-166 - "The Ohio Woodland Survey." Measurements taken at 12-foot log lengths above a 1.0-foot stump height. Scaled as 12-foot logs, and additional shorter top logs; top sections less than 8 feet in length scaled as fractions of an 8-foot log.

Table prepared in 1941 by the equation method. Multiple correlation coefficient (R) is .99; Standard error of estimate is approximately 10% of estimated volumes. Blocks show limits of basic data.

The total estimated gross volume of single hemlock trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the elements comprising cull, combined with local experience of millmen as regards losses from rot, shake, etc. in utilizing this species.

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J. Richard Krawmer